

REMARKS

The rejection of Claims 1-12, 14 and 17-20 under 35 U.S.C. § 103(a) as unpatentable over U.S. 5,026,936 (Leyshon et al) in view of U.S. 3,832,449 (Rosinski et al), which was affirmed by the Board, is respectfully traversed to the extent it applies to the above-amended claims.

Applicants argued in the Appeal Brief that since Leyshon et al requires a subsequent metathesis reaction, it suggests to persons skilled in the art that satisfactory yields of propylene require the addition of such a metathesis reaction. This is confirmed by the actual example (Example 1) in Leyshon et al. Example 1 shows a stream **103** following cracking and prior to subjecting the components of the stream to further processing, and then metathesis. As shown in Table 1 therein, stream **103** contains a total amount of product of 144.6 M pounds per hour, 30.4 pounds of which are propylene (wherein M is 1,000 pounds). The selectivity to propylene is therefore  $(30.4/144.6) \times 100$ , or 21%. This selectivity can be contrasted with the selectivity to propylene in Example 3 of the present invention of about 40%, as shown in Table 2 and Figure 1 herein. Note that the feed in Leyshon et al's Example 1, represented by stream **102**, is not significantly different from the feed in said Example 3 of the present invention, shown in Table 1 herein at page 8, line 8ff of the specification.

Thus, in contradistinction to Leyshon et al's disclosure that the zeolites are generally interchangeable but that ZSM-5 is preferred, Applicants have shown that not all zeolites are interchangeable and that ZSM-5 is inferior to ZSM-12, and that the molar ratio of silica/alumina of the ZSM-12 used is significant.

In the Reply Brief, Applicants argued that they have been able to obtain satisfactory yields of propylene without the addition of a metathesis reaction, a result that could not have been predicted from Leyshon et al.

The Board's response to the above arguments is that the use of the term "comprising" left the claims open to additional steps, such as the metathesis step of Leyshon et al (Decision at 9-10). However, the present claims now foreclose the metathesis step of Leyshon et al. There is clearly no motivation to omit the metathesis step in practicing Leyshon et al. If a proposed modification would render a prior art invention unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). See also MPEP 2143.01.

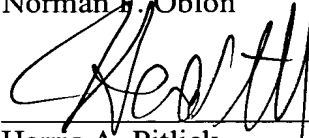
For all the above reasons, it is respectfully requested that the rejection over Leyshon et al in view of Rosinski et al be withdrawn.

All of the presently-pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this case to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

Norman F. Oblon



Harris A. Pitlick

Registration No. 38,779

Customer Number

22850

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/03)  
NFO/HAP/cja